

RECEIVED
SEP 21 2018

Department of Water Resources
Eastern Region



BROCKWAY
ENGINEERING
P.L.L.C.

Hydraulics

Hydrology

Water Resources

September 17, 2018

James Cefalo
Idaho Department of Water Resources
900 North Skyline Drive, Suite A
Idaho Falls, ID 83402-1718

Re: Idaho Water Company Transfer 29-7006

Dear Mr. Cefalo:

Idaho Water Company desires to transfer a 1.5 cfs, 590.6 acre feet or 205.0 acre portion of water right 29-7006 to an industrial facility in Pocatello, Idaho. It is calculated that when the transfer is approved 471.5 acre feet of industrial water will be available at the facility. An agreement between Idaho Water Company and Great Western Malting Co. has been entered into allowing Idaho Water Company to transfer the 471.5 acre feet of water to the facility.

Water right 29-7006 is currently under a lease contract into the Idaho Water Supply Bank until 2020. Water right 29-7006 has been under lease contract since 2011. Water right 29-7006 was under CRP contract from 1997 through 2010. An affidavit from Vern Bastian (Lynn Bastian's brother) has been provided that states that hay and grain was grown by water right 29-7006 before the water right was under CRP contract. An affidavit from Don Marley (a neighboring property owner) has been provided that states that hay and grain was grown on the farm. No other historical data has been able to be located prior to 1997.

Based on the affidavits, the estimated historical crops grown on the farm was alfalfa and grain crops prior to 1997. The ET_{Idaho}2012 data indicates that alfalfa has a 2.71 ft/acre consumptive use and grain has a 1.98 ft/acre consumptive use. An average consumptive use of 2.3 ft/acre for 205.0 acres was used to calculate the proposed 471.5 acre feet of industrial water that is to be transferred.

All of the surface water sources in the Marsh Valley area flow into the Portneuf River which is a tributary to the Snake River. Based on previous correspondence with IDWR and formal orders from IDWR pertaining to 29-7006, water in the aquifer flows north towards Pocatello, Idaho. "The Marsh Valley aquifer is not directly connected to the ESPA, but groundwater discharge to Marsh Creek may be conveyed to the ESPA boundary as surface flow via the Portneuf River. The Portneuf River does not have significant interaction with ground water between Inkom and Batiste Road. At Batista

CHARLES E.
BROCKWAY,
PH.D., P.E.

CHARLES G.
BROCKWAY,
PH.D., P.E.

2016 NORTH
WASHINGTON
STREET • SUITE 4

TWIN FALLS,
IDAHO 83301

208•736•8543

FAX: 736•8506

82746

Road the Portneuf River becomes hydraulically connected to the ESPA and begins to gain significant flow from ground water.” “Ground water discharge to Marsh Creek is natural flow subject to diversion from Marsh Creek or the Portneuf River. If groundwater discharge to Marsh Creek resulting from non-pumping at the current POD is diverted upstream of Batiste Road, the transfer spreadsheet analysis is invalid.” (Preliminary Order Denying Transfer Application 79844)

The Great Western Malting Co. facility is located in ESPA Model cell 97 120. An ESPA Model transfer spreadsheet analysis at this location is not valid due to IDWRs findings detailed in the Preliminary Order Denying Transfer Application 79844. The Great Western Malting Co. facility is located on the Portneuf River but upstream of Batiste Road. There is a lack of interaction of ESPA ground water and water in the Portneuf corridor at this location.

It is proposed to divert the 471.5 acre feet of 29-7006 that flows into the Portneuf River from ground water wells that are approximately 380 feet from the Portneuf River. IDWR has previously accepted hydraulic analysis of stream-aquifer interactions known as the 50% in 24 hours rule. Which allows surface water to be diverted from a well if 50% of the water pumped from the well in a 24 hour period is being pulled from the stream. Based on eight well driller's logs that are located in the vicinity of the Great Western Malting Co. facility and aquifer conditions calculated from the well log data, 52.6% of the water pumped from the facility wells is provided by the Portneuf River.

This transfer is being submitted because non-pumped ground water from 29-7006 is discharged into Marsh Creek and is conveyed down the Portneuf River where there is limited interaction of surface water with ground water. The industrial facilities wells are pumping over 50% of their water from the Portneuf River.

Sincerely,



Greg Sullivan, M.S., Engineer

Cc: Del Kohtz, Erika Malmen

Enc: Transfer Application, Aerial Maps, Transfer Calculation Spreadsheet, Contract of Agreement, WSB Attachment, WSB Lease Contracts 2011-2020, CRP Contract, Affidavits, Purchase and Sale Agreements, Annual Reports, Stream-Aquifer Interaction Analysis, Brockway Engineering Check # 14895 for \$580.00